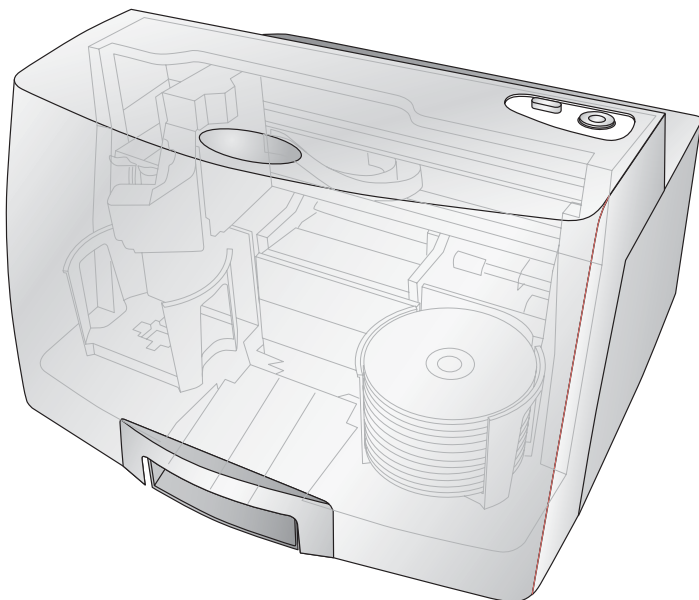




BravoPro™
AUTOPRINTER

**Automated Optical
Disc Printing System**



USER'S MANUAL
For Macintosh and PC

PRIMERA

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Printing History

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FCC Compliance Statement: This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For Users in the United States: This product is intended to be supplied by a UL listed Direct Plug-In Power Supply marked "Class 2" or a UL listed ITE Power Supply marked "LPS" with output rated 12VDC, 4.5A or higher. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of shielded cables is required to comply with the Class B limits of Part 15 of the FCC Rules. You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate and/or obtain warranty service for this equipment.

For Users in Canada: This digital apparatus does not exceed the Class B limits for radio noise for digital apparatus set out on the Radio Interference Regulations of the Canadian Department of Communications. Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la class B prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.

CAUTION!

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THE UNIT TO RAIN OR MOISTURE. TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE EXTERIOR PANELS. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. OPERATE THE UNIT WITH ONLY THE PROPER ELECTRICAL SPECIFICATIONS AS LABELED ON THE PRINTER AND AC ADAPTER.

CAUTION!

**THIS PRODUCT CONTAINS A LASER DIODE OF A HIGHER CLASS THAN 1. TO ENSURE CONTINUED SAFETY, DO NOT REMOVE ANY COVERS OR ATTEMPT TO GAIN ACCESS TO THE INSIDE OF THIS PRODUCT. REFER ALL SERVICING TO QUALIFIED PERSONNEL. THE FOLLOWING LABEL APPEARS INSIDE YOUR UNIT:
CLASS 1 LASER PRODUCT LASER KLASSE 1**

CAUTION!

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION.

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Interactive Feature in this PDF Document

There are interactive features that will allow you to jump to different locations within the document. Each listing in the Table of Contents is interactive. Place the cursor on either the words or the page number. A small hand with a pointing finger icon appears. Click on the line with the icon and the document will jump to that page. If you want to return to the Table of Contents, move the icon to the top of the page and click on the arrow marked TOC. Navigating through the Index is similar. Place the icon on one of the listings or page numbers, click on it, and it will move to that page. The text relating to the Index listing will appear in red. Returning to the Index can be done by clicking on the arrow marked Index.

Section 1: Getting Started

THANK YOU...

...for purchasing the BravoPro™ AutoPrinter. The BravoPro is the perfect all-in-one solution for printing professional looking CDs and DVDs. Operation is simple and completely automatic once a job has been started.

To begin using your AutoPrinter, please read this manual carefully. This Operator's Manual is a complete step-by-step guide to quickly and easily print discs with your new AutoPrinter.

NOTE ON TERMS AND CONVENTIONS:

From this point forward, the following terms and conventions will apply:

The BravoPro AutoPrinter will be abbreviated simply as the Printer.

Optical discs, which can include many different types of discs including CD-Rs, CD-RWs, DVD+/-Rs and more are all referred to as CDs or discs.

A. CHOOSING A GOOD LOCATION

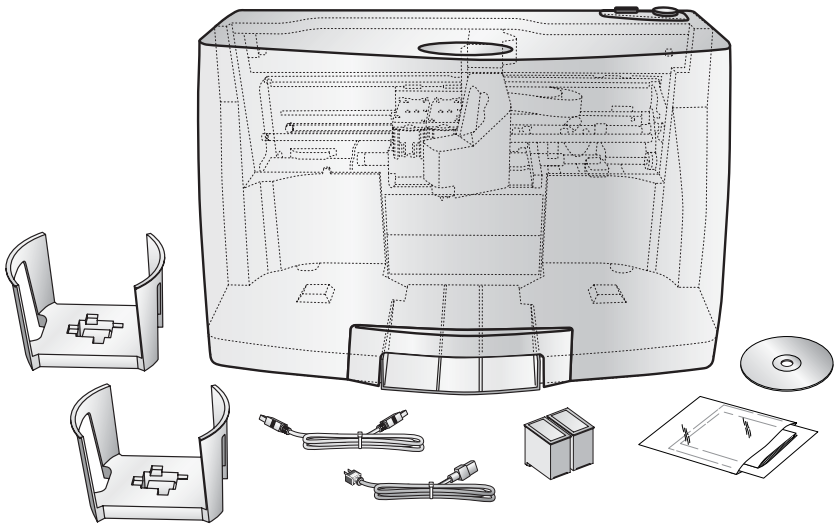
- Place the Printer in a location with adequate air circulation to prevent internal heat build up. You will need at least 24" (61 cm) of overhead space to allow the top cover to open freely.
- Do not place the Printer near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.

B. UNPACKING AND INSPECTION

While unpacking your Printer, inspect the carton to ensure that no damage has occurred during shipping. Make sure that all supplied accessories are included with your unit.

The following items should be included:

- Optical Disc Printer
- Gray Plastic Input and Output Bins
- Power Cord
- One Three-Color (CMY) Ink Cartridge
- One Monochrome Black Ink Cartridge
- QuickStart Installer Disc
- USB Interface Cable (Beige)
- Warranty Card
- This Operator's Manual, Quick Start Guide and Other Printed Information

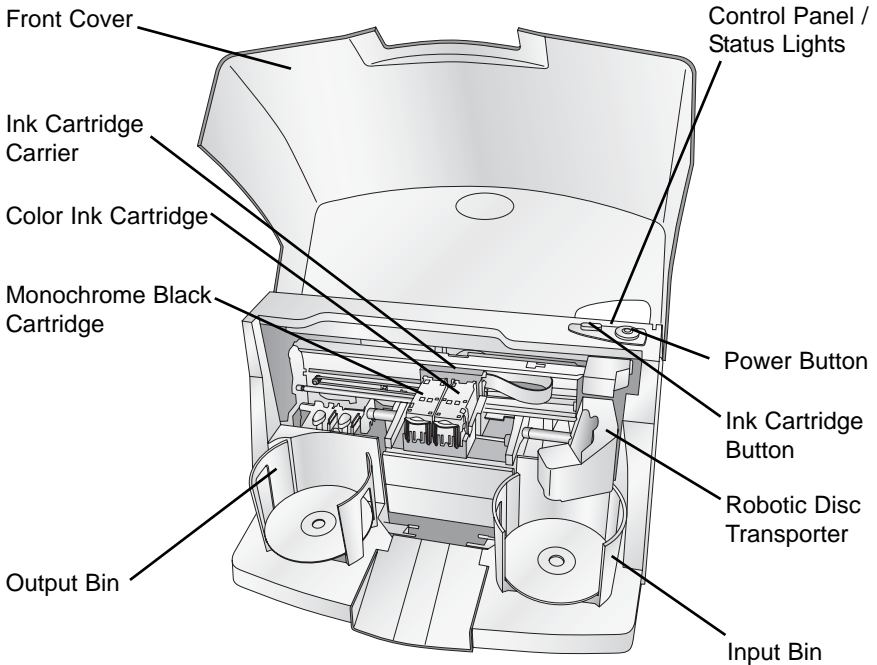


Save the carton and packing materials. They will come in handy later if you ever need to transport the Printer and/or any of its parts and accessories.

C. IDENTIFYING THE PARTS

Front Panel and Top

This illustration shows the Printer, its Control Panel, Buttons, **LED indicator lights**, Input and Output Bins and other components.



The **Robotic Disc Transporter** moves discs from the Input Bin, to the printer, and finally to the Output Bin.

The **Control Panel** contains LED Status Lights and Buttons to control the Printer. The **LED Status Lights** indicate that Power is ON. They also blink in certain patterns to indicate an error or other condition of the Printer. See Section 4 for a full explanation of the LED Status Light conditions.

The **Power Button** turns the Printer's power ON and OFF.

When the front cover is opened, the **Ink Cartridge Button** is used to position the Cartridge Carrier for easy ink cartridge replacement. When the front cover is closed, pressing the Ink Cartridge button will open or close the Printer Tray.

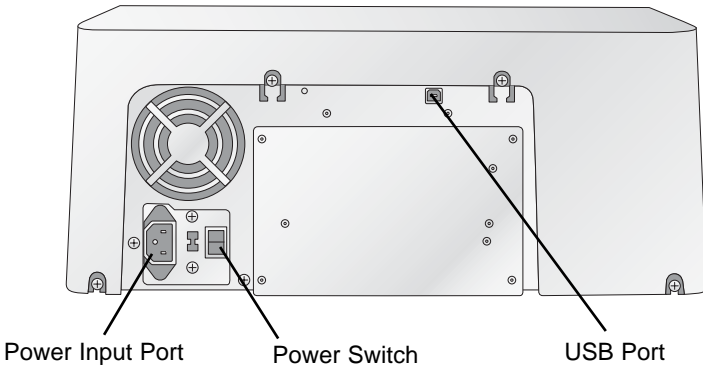
The **Input/Output Bins** are situated under the top cover of the Printer. The bins will hold up to 50 discs. The right-side bin is the Input Bin for blank media; the left-side bin is the Output Bin for finished discs.

The **Front Cover** is a durable plastic cover that will protect the Printer from dust and interference.

The **Ink Cartridge Carrier** holds both a color ink cartridge (right-side pen) and a monochrome ink cartridge (left-side pen).

Rear Panel

This illustration shows the input ports and the power switch found on the rear panel of the Printer:



The **USB Port** is connected to an open USB port on your PC with the USB cable, included with your Printer.

The **Power Input Port** connects to the included power cable. The internal power supply is a switching 100V~240V power supply.

The **Power Switch** shuts off all power to the Printer.

D. PC SYSTEM REQUIREMENTS

Before getting started, it is important for you to verify that your PC meets the minimum system requirements. Here's what you need in order to successfully print:

- 700 MHz or faster Pentium III/IV processor running Windows 2000 or XP.
- 512 MB or greater RAM

- Free hard drive space of at least 10 GB.
- Available USB Port.

If your PC does not have these minimum system requirements, system performance may not be acceptable.

E. MAC SYSTEM REQUIREMENTS

Before getting started, it is important for you to verify that your computer meets the recommended system requirements. Here's what you need in order to successfully burn and print with the Discrite software:

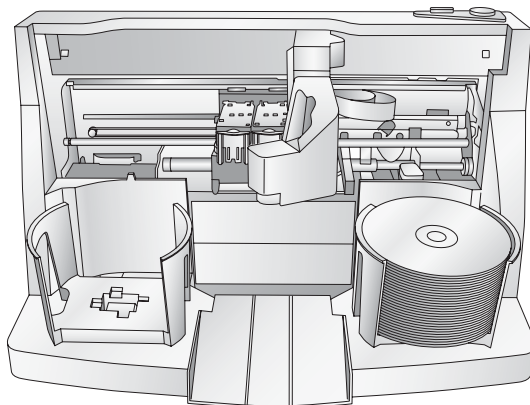
- G4 PowerPC 700MHz or higher running OS X version 10.2 or higher
- 256MB RAM
- Free hard drive space of at least 2 GB (up to 6 GB for DVD)
- Available USB 2.0 Port
- Do not connect the Printer to any USB hubs or the USB port on your keyboard. It should be connected directly to an onboard USB 2.0 port.

If your computer does not have at least these minimum system requirements, system performance may not be acceptable.

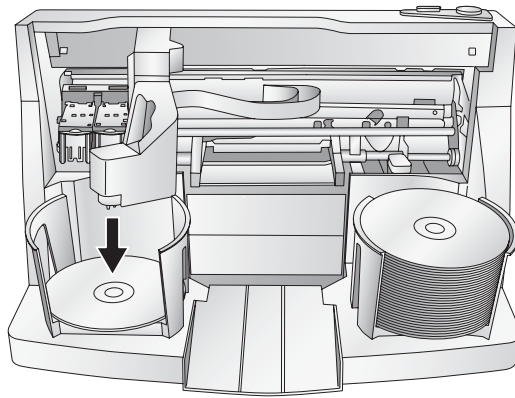
F. OVERVIEW OF OPERATION

Your new Printer is an automated, precision device intended for continuous-duty publishing of discs. The following is a description of the complete process of printing a CD/DVD job on your Printer:

1. Up to 50 blank discs may be loaded at one time into the Input Bin.



2. The Robotic Disc Transporter will pick a disc from the Input Bin. After each disc is placed in the printer, the Robotic Disc Transporter checks the input stack to "see" if multiple discs were accidentally picked.
3. Printing will now begin. Print time varies according to which print mode has been selected (section 3-A). In most cases, print time takes no more than 2 minutes. After printing the first disc, the Printer's Disc Tray opens automatically. The Robotic Disc Transporter moves the finished disc to the Output Bin.
4. The Robotic Disc Transporter will now load the second disc into the Printer Tray for printing.



5. The process starts over and repeats until all blank discs are gone or the number you have specified via software are printed.
6. Now that you understand the order of operation, it is time to set up your Printer.

Section 2: Hardware and Software Setup

Set-Up

This section will describe the step-by-step process of setting up your Printer. This includes information on how to load the supplies (ink and disc media) necessary to start printing discs.

A. INSTALLING THE PC SOFTWARE

The Installer Disc has a QuickStart menu that will guide you through the process of setting up your duplicator. Please refer to the following for more information on each step:

1. Place the CD/DVD Printer Installer CD in your CDROM Drive. The Installer application should automatically launch in a few moments. If it does, proceed to Step 2. If it does not automatically launch, follow these steps:
 - Double-click the My Computer Icon, then double-click the icon of the appropriate CD drive containing the Software Installer disc.
 - Double-click INSTALL.exe
2. In the Installer Application, click the **QuickStart Install** button. The on screen instructions will guide you step-by-step through the installation process.

B. INSTALLING THE MAC SOFTWARE

Before installing the software please note that all software must be installed on a hard disk. Once you have installed the software, store the original program CD-ROM in a safe place.

Please note that your user account must have administrative rights to properly install a new printer. You can check with your system administrator or check with Apple support to confirm whether or not your account has administrative rights.

Install the software as follows:

- a. Insert the Installation CD-ROM in your system's CD-ROM drive.
- b. Double-click the CD-ROM icon.

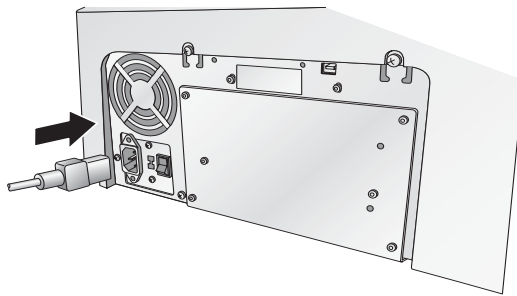
- c. Double-click on the **AutoPrinterPro Installer.mpkg** file icon. Follow the on-screen instructions.
- d. The volume containing the operating system should be selected for installation. Click the **Continue** button. All components will be installed to their proper locations.
- e. Once the installation has completed, click **Quit**.

You have successfully installed all the necessary software!
Section C below will describe how to connect the Printer to your Mac.

C. HARDWARE SETUP

Step 1: Applying Power

- Locate the power cord supplied with your Printer.



- Plug the adapter into a surge protected outlet, and plug the power plug into the power port on the rear panel of the Printer.

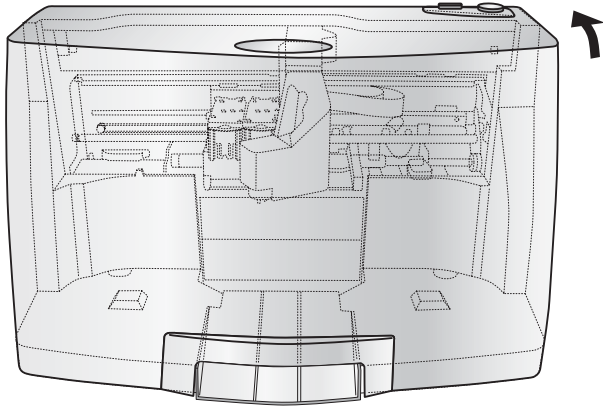
Step 2: Loading Media (Discs)

NOTE: Your Printer can print directly onto virtually any brand of inkjet printable-surface CD/DVD media. However, different brands of discs have different printable coatings. Because of this, you may need to adjust the printer driver settings to accommodate your specific brand of CD/DVD media. Refer to Section 3A and 4E for further printer driver information.

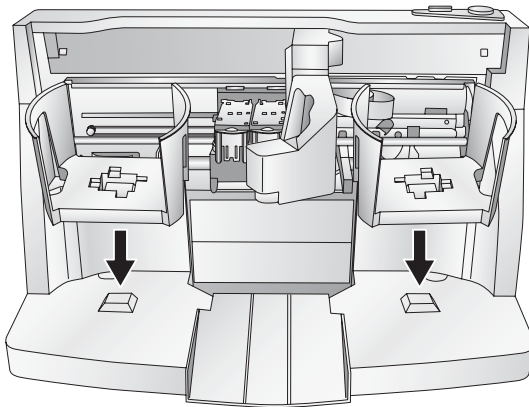
Due to the wide variety of printable-surface CD/DVD media, you may find that certain brands of discs provide higher print quality than others. For maximum print quality, use CD/DVD media authorized by Primera.

Refer to the following steps when loading discs in to the Printer:

- Open the front cover of the Printer



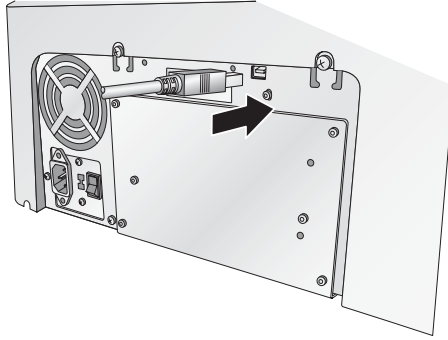
- The Printer will automatically position the cartridge carrier and Robotic Disc Transporter to the center position allowing for easy access to the bins.



- Load the Input Bin (the bin located on the right-hand side of the Printer) with 50 blank discs and place the bins on the mounting pegs.

Step 3: Connecting the USB 2.0 Cable

Connect the Printer to your PC or Mac with your beige USB 2.0 Cable. If you are using a PC, after a few moments, Windows will tell you it has found new hardware and is looking for software to install it.




Select "**Install the software automatically**" and click **Next**.

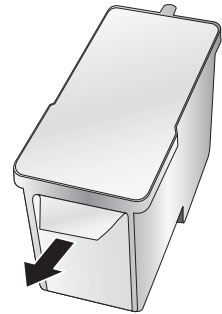
You may see a notice like the one shown here stating that the Printer has not passed Windows Logo Testing. Click **Install Anyway** to continue installing the printer driver for your Printer.



Note: When connecting USB to a Mac it may be necessary to Add the printer via the Printer Setup Utility.

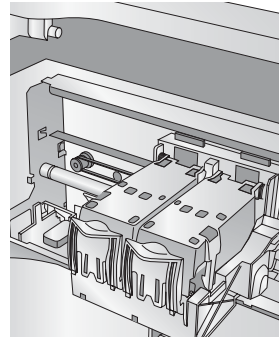
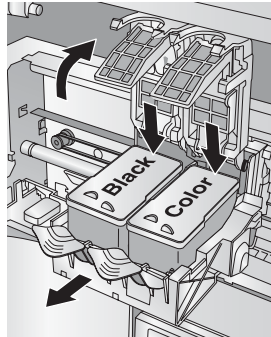
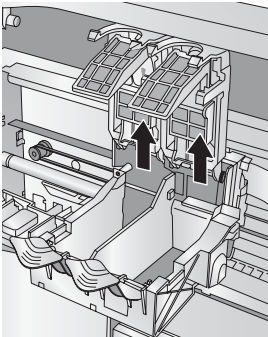
Step 4: Installing Ink Cartridges

- With the cover open, press the Ink Cartridge Button  to move the Ink Cartridge Carrier to the load position and open the ink cartridge covers.
- Remove each ink cartridge from its packaging.
- Slowly remove the tape covering the cartridge's print head.



DO NOT TOUCH THE COPPER AREA!

- Insert the ink cartridges into the carrier, copper end first and snap the cartridge cover in place. Insert the color in the right holder, monochrome black in the left cartridge holder. The cartridge labels are color coded to the cartridge covers.

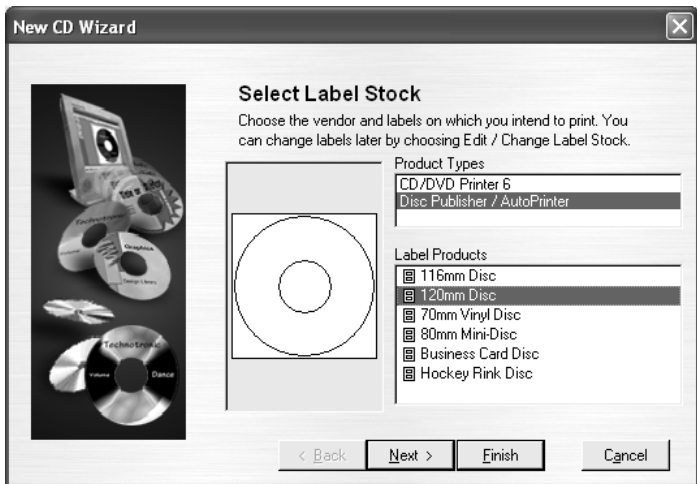


- Close the Printer's front cover.

D. TUTORIAL: PRINTING DISCS ON A PC

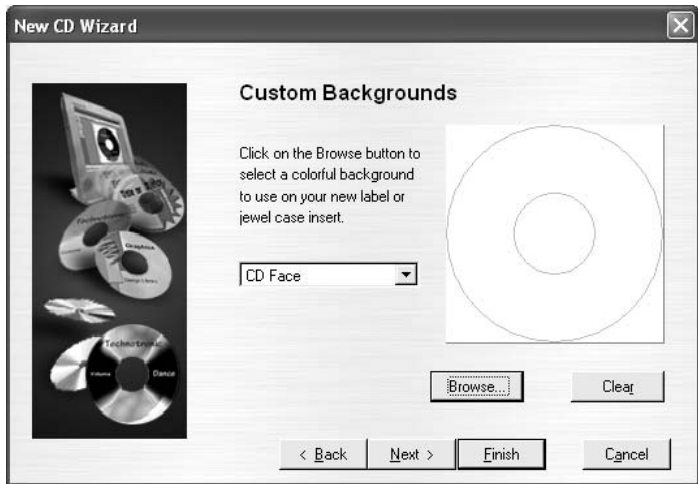
The SureThing Disc Labeler software included with your Printer is a great tool for creating professional looking discs. You can use SureThing's Smart Designs to quickly label a disc, or easily import your own design in many popular file formats. The Help file included with the SureThing software will provide complete instructions on all the features in this package. (Go to the Help Menu - Contents) To launch SureThing, click your Windows Start menu button and choose SureThing CD Labeler 3.1 Primera Edition. The following is a tutorial on creating a basic disc design:

1. Click **New...**



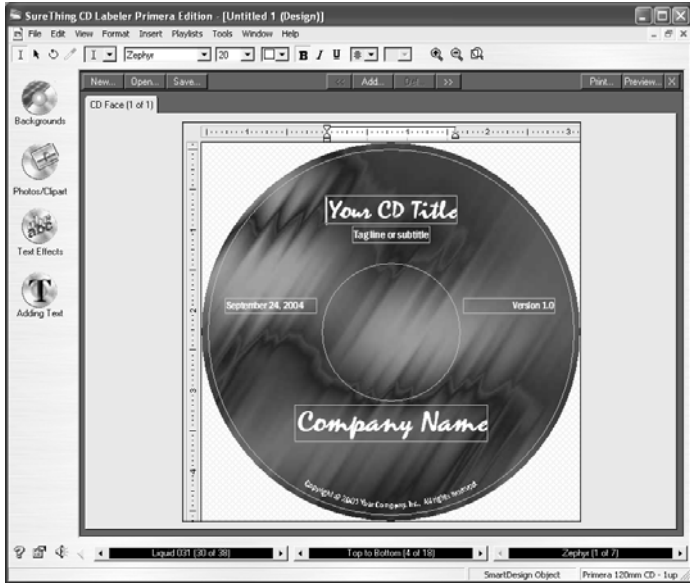
2. Select **120mm Disc** under Label Products and click **Next**.

3. Click **Browse** to look through the many built-in backgrounds included with SureThing, or click **Clear** if you would like to import your own background or design. Click **Next**.



4. Check **Use Smart Designs** to browse through different built-in designs. Deselect this option if you would like to create your own layout. When finished, click **Next**.

5. Click **Finish**. You should now see your basic layout. Simply double click on text boxes to modify the standard text with your information. If you want to import your own graphics, click **Photos/Clipart** to browse for images. Many standard clipart symbols are included with your software.



6. Once you are happy with your design, save it as a SureThing Design (*.STD) file format.
7. To Print, go to the file menu. Choose Print. Select the number of copies you wish to print. Select the Disc Publisher Pro as the printer. To edit print preferences, click the options button. Once you are ready to print, click **OK**.

Section 3: Printing Discs on a PC

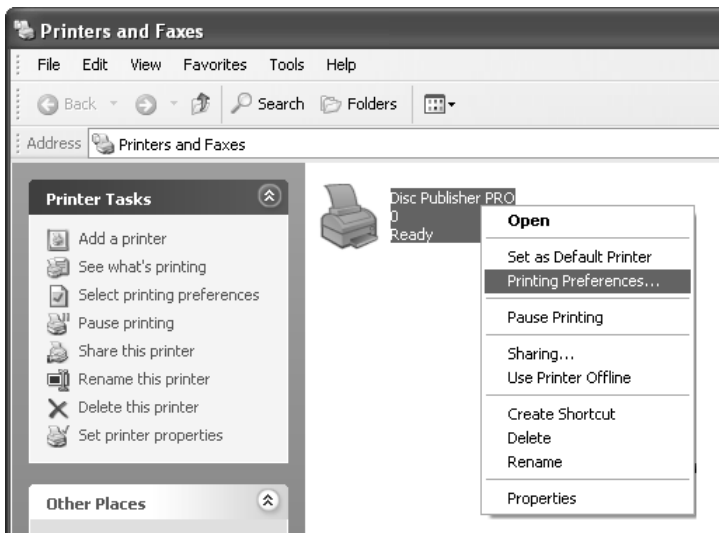
The printer driver allows you to adjust quality, speed and other settings. Both will be described in detail in this section.

A. SETTING UP THE PRINTER DRIVER

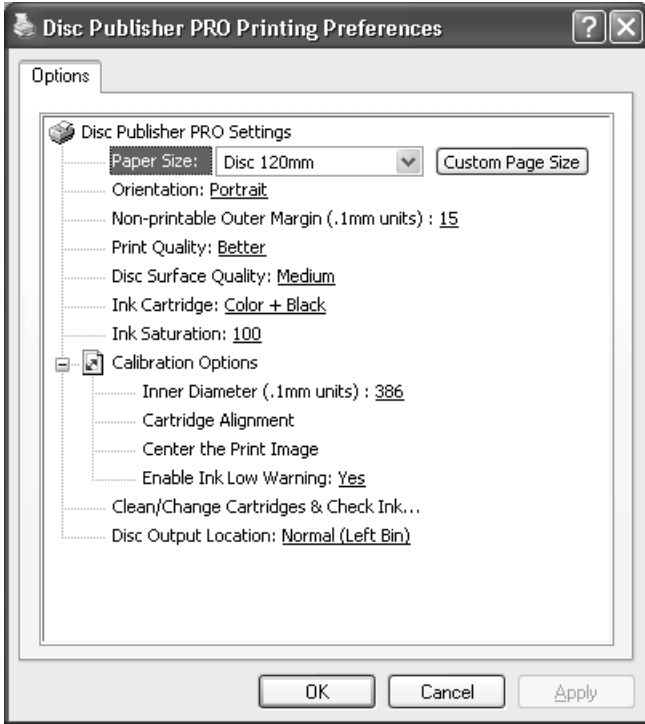
Once the Printer software has been successfully installed, you will want to take a moment to familiarize yourself with the printer driver settings for your Printer. These settings affect the print quality of your discs. The default settings of the printer driver will fit most printing needs. Please refer to the following steps to change or verify your printer driver options:

1. Click the **Start** button. For Windows 2000 point to **Settings** and click on **Printers**. For XP Professional click on **Printers and Faxes**. For XP Home click on **Control Panel**, then click on **Printers and Other Hardware**, then click on **Printers and Faxes**.

Click on the **Disc Publisher Pro** icon with the right mouse button and select **Printing Preferences**.



NOTE: Most applications allow you to change these same printer driver options from their "Print" and/or "Printer Setup" screens. This means that you don't have to go back to the main printer setup window each time you want to change a setting or option in the printer driver. These applications will usually give you the same choices and options, but in a slightly altered format. Some applications do not save your printer driver option changes, but instead only use your changes for the current image or print job.



Paper Size

The paper size option will be set to CD for printing onto printable surface CDs and DVDs. The remaining options apply if you have purchased the business card adapter kit.

Disc 120mm - This setting allows for printing to the outer edge of the disc.

Mini-Disc 80mm - This setting prints to Mini-Disc or CD Single size discs (Primera Part Number 53362).

Business Card Disc - This prints to the 58mm by 86mm rectangular business card CD-r media (Primera Part Number 53340).

Hockey Rink Disc - This setting is for the rounded edge or, "Hockey Rink", shaped business card CD-r media (Primera Part Number 53341).

Non-printable Outer Margin

Adjust this value to print all the way to the outer edge of a CD. This is useful if you are printing full coverage images. The lower you set this value the farther to the outer edge of the CD you will print. Please note that with most media the printable surface does not extend all the way to the edge of the disc. Because of this you will not normally set this value to zero. You may also want to adjust the inner diameter setting found under the Calibration Options which is explained later in this section.

Resolution

Select the appropriate print quality option for your image. Keep in mind that Normal provides the lowest quality but with the least ink usage. Best provides the highest quality but with higher ink usage. Print speeds also vary slightly between settings. However, speed is affected most by the Disc Surface Quality setting. You may wish to experiment with these options to see which one is best for your particular CD media and print quality requirements.

Disc Surface Quality

This setting affects the quality, speed and ink usage of the print. **Color matching** is also tied to this setting. Start with the default setting for fastest printing and the least amount of ink consumption. If the quality needs improvement move to the next highest setting.

Cartridge Type

Select Color to print using only the color cartridge. Using this setting still allows you to print black. The Printer uses all three colors to create the black portions of the image. The Monochrome Black setting prints using the Monochrome Black cartridge only. The Printer will print in gray scale whatever image is sent including color images.

Ink Saturation

This option controls the ink saturation of the printed image. When printing onto the printer manufacturer's TuffCoat CD media, this option can be left at its default setting of 100%. When printing onto other brands of printable CD media, you may need to adjust this control in order to optimize the ink saturation for the printable surface of your specific CD media. Click on the up and down arrows to change the ink saturation setting. Lower numbers reduce the overall ink saturation, while higher numbers increase it. If discs do not seem to be drying completely it may be necessary to reduce this value.

Calibration Options

Click on the plus to reveal the following four Calibration options.

Inner Diameter

This value changes the size of the non-printed center. Larger numbers cause the non-printed center to be larger and smaller numbers make the non-printed center smaller. This number is incremented by 0.1mm so a change of 10 for inner diameter changes the diameter by 1mm.

Inner Diameter Non-Printed Diameter

386 1.518" (38.6mm) (TuffCoat™, Default)

220 0.865" (22.0mm) (Typical Hub-Printable CD/DVD)

150 0.591" (15mm) (Physical Center)

Cartridge Alignment

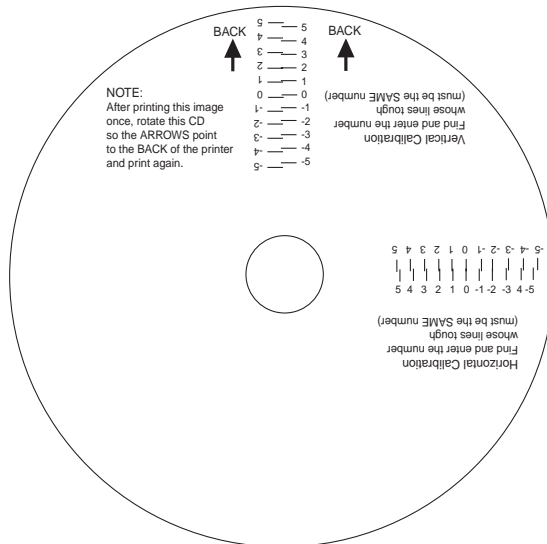
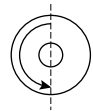
The Cartridge Alignment prints a test print and then automatically scans the print to configure your printer for bidirectional printing and to align the color and black cartridges for Color+Black printing. It is important to perform this calibration every time you change a cartridge. If you forget to perform this calibration you will be prompted to do so before your first print from the new cartridge.

Center The Print Image

NOTE: Your printer comes from the factory pre-calibrated to print the image in the center of the CD. You can use this adjustment if you need to fine-tune this location.

If you ever wish to verify your factory-calibrated Vertical and Horizontal calibration settings, you can run a simple calibration procedure to assure that your images will be centered when printed on a CD. To do this, refer to the following steps:

1. Verify that a disc and a color ink cartridge are installed in the Printer. It is important to use the same disc you normally use for your publishing because different brands of discs may vary slightly in size. Also, verify that the Printer is powered ON and that it is connected to your computer.
2. Click on the **Center the Print Image** and then the **Properties** button. The printer will begin printing the calibration test print.
3. When the print is complete, rotate disc 180° and put the disc back in the input bin and repeat step 2 using the same disc.
4. When the second run of the print is complete, you should have a test print that looks similar to the following:



5. Along the Vertical axis of the printed disc, find the number whose lines touch. For example, in the above illustration, Enter the number 2 into the Vertical box of the Calibration window and 0 for the Horizontal axis.
6. Select the **OK** button. Your images should now be centered when printed on a disc.

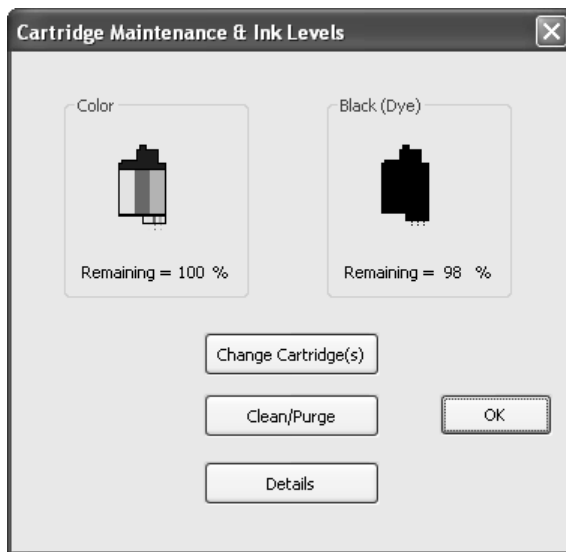
After your selections have been made, close out of the printer setup window. You are now ready to go to an application program and print. All printer driver selections will stay the same until you change them.

Enable Ink Low Warning

This setting lets you enable or disable the warning from the printer to tell you when the ink cartridges are getting low.

Clean/Change Cartridges & Check Ink Levels

Select this button to display the current ink levels as well as options for cleaning and changing cartridges.



Change Cartridge(s)

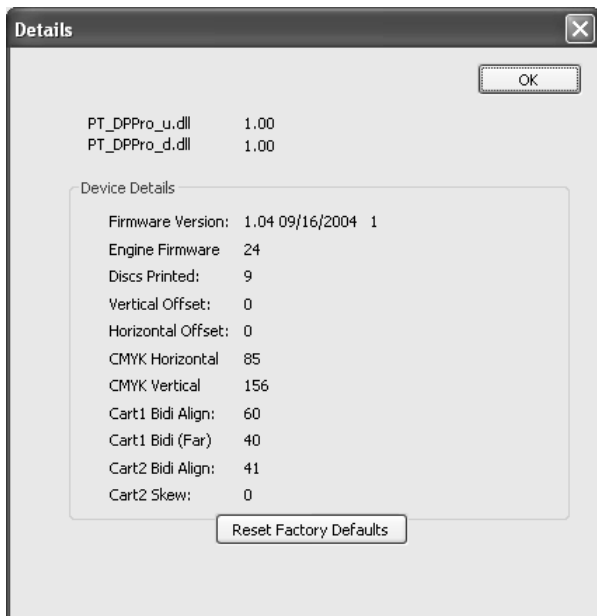
Select the Change Cartridge(s) button to install a new ink cartridge or to switch back and forth between previously used cartridges. After the cartridge has been replaced according to the instructions in Section 2, Step 4: Installing Ink Cartridges, select either the New Cartridge Installed button or the Old Cartridge Installed button accordingly.

Clean/Purge

Select Clean/Purge button to send a simple test pattern to the printer. Be sure to have a disc in the Printer's input bin and the front cover closed. The test pattern purges ink through nozzles of your ink cartridge to clear any blockages.

Details

Select the Details button for information on the drivers, firmware, alignment and number of discs printed with your Printer. Click **Reset Factory Defaults** to set all print centering and cartridge alignment settings back to factory defaults.



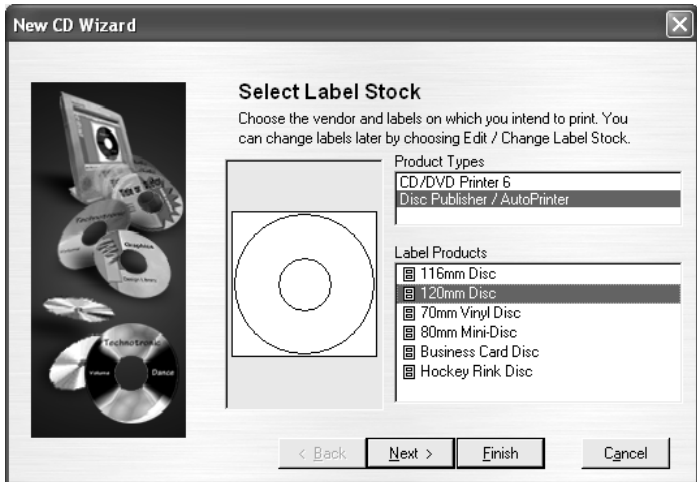
Disc Output Location

This can be set either Normal (Left Bin acts as output), or Kiosk (finished discs deposited out the Front Exit). The default is Normal (Left Bin).

B. USING SURETHING

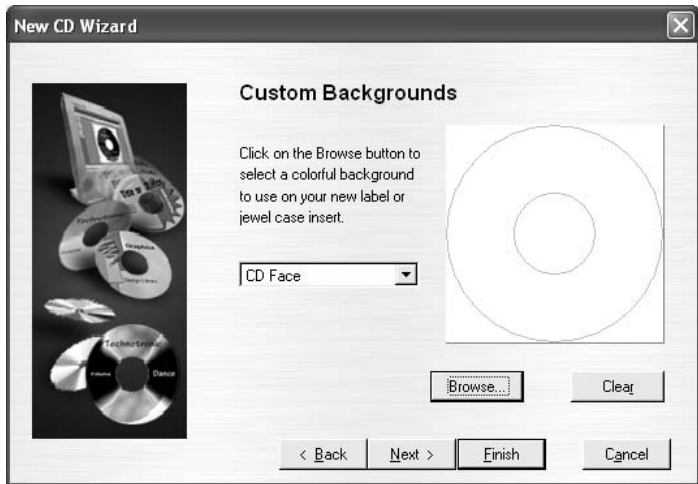
The SureThing Disc Labeler software included with your Printer is a great tool for creating professional looking discs. You can use SureThing's Smart Designs to quickly label a disc, or easily import your own design in many popular file formats. The Help section included with the software will provide complete instructions on all the features in this package. (Go to the Help Menu - Choose Contents) The following is a tutorial on creating a basic disc design:

1. Click **New...**



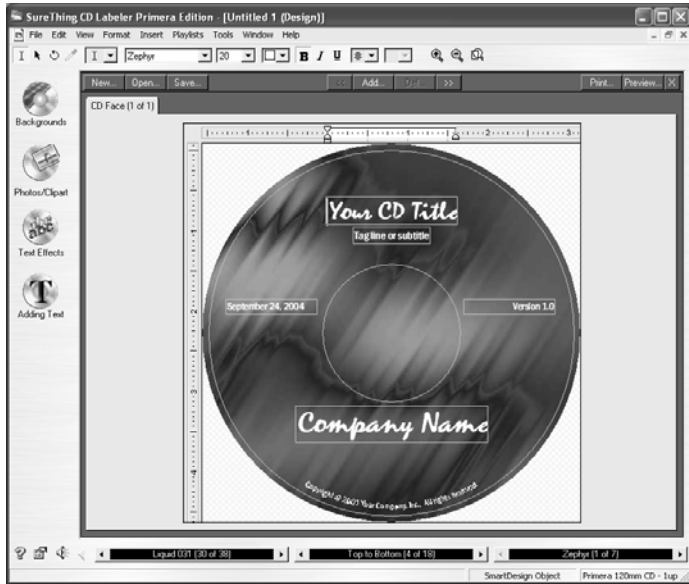
2. Select 120mm Disc under Label Products and click **Next**.

3. Click **Browse** to look through the many built-in backgrounds included with SureThing, or click **Clear** if you would like to import your own background or design. Click **Next**.



4. Check **Use Smart Designs** to browse through different built-in designs. Deselect this option if you would like to create your own layout. When finished, click **Next**.

5. Click **Finish**. You should now see your basic layout. Simply double click on text boxes to modify the standard text with your information. If you want to import your own graphics, click **Photos/Clipart** to browse for images. Many standard clipart symbols are included with your software.



6. Once you are happy with your design, save it as a SureThing Design (*.STD) format.
7. To Print, go to the file menu. Choose **Print**. Select the number of copies you wish to print. Select the Disc Publisher Pro as the printer. To edit print preferences, click the options button. Once you are ready to print, click **OK**.

C. USING OTHER GRAPHICS PROGRAMS

While SureThing will handle most labeling needs, some people prefer to use other graphic programs. Your printer driver allows you to print from most any graphics application. The driver will center the image and automatically crop it to the shape of a CD. This means you do not necessarily need a template to create a CD in your favorite graphics program. Simply create a custom page size of 120mm (4.72 inches) square and center your image in that area and the driver will do the rest. The center sizes listed in section 3A should guide you in creating your disc. Because the driver crops the image to the shape of a CD, you do not want to make your design round. You will find it is best to "over bleed" your design by filling the whole 120mm area with your image. This ensures the outer and inner diameters will print perfectly round on your disc.

D. USING KIOSK MODE

Kiosk Mode allows you to use both of Bravo's Bins as input, doubling your disc capacity from 50 discs to 100 discs. In this mode, the finished discs will be deposited out through the front of the Bravo. Refer to the Kiosk Kit User Manual for specific installation instructions. Kiosk mode is enabled as follows:

Click the Start button. For Windows 2000 point to Settings and click on Printers. For XP Professional click on Printers and Faxes. For XP Home click on Control Panel, then click on Printers and Other Hardware, then click on Printers and Faxes. Click on the Disc Printer Pro icon with the right mouse button and select Printing Preferences.

Find the **Disc Output Location** setting at the bottom of the preferences screen. Set it to "Kiosk".

Section 4: Printing Discs on a Mac

A. PRINTED LABEL FORMAT REQUIREMENTS

Your printer driver allows you to create labels in most any graphics application. The driver will center the image and automatically crop it to the shape of a CD. This means you do not necessarily need a template to create a CD in your favorite graphics program. Simply create a custom page size of 120mm (4.72 inches) square and center your image in that area and the driver will do the rest. The center sizes listed in Section E should guide you in creating your disc. Because the driver crops the image to the shape of a CD, you do not want to make your design round. You will find it is best to "over bleed" your design by filling the whole 120mm area with your image. This ensures the outer and inner diameters will print perfectly round on your disc.

Label Format Requirements:

- 4.72 x 4.72 (120mm) Square Image.
- No Circular Images

To Print and burn simultaneously through the Discrite program the image will need to be in one of the following supported file formats:

JPEGs, TIFFs, PICTs, PDFs, GIFs, BMP, JPEG 2000, MacPaint, Photoshop, PNG, QuickTime Images, SGI, TGA, and more.

In order to help you design your label, included on the installation disc are templates in eps format. These templates will help you get started designing your label.

To use the template follow these steps:

1. Open the template in Photoshop or Illustrator.
2. Create a new layer for your image or graphics. (Make sure the template layer is on top of the image layer)
3. Place your image or design your graphics on the new layer. Use the template as a guide for image and graphics placement.

4. Before you print or save your image in another format, either hide the template layer or delete the template layer. The circular shape and center cut out should not be printed. Use it only as a guide to layout your image.

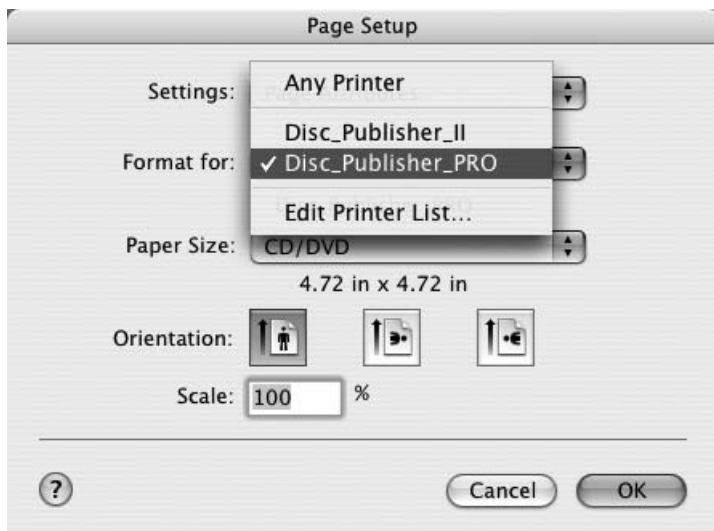
B. PRINTING

To print simply follow the normal procedure for printing from your graphics application. Select the Disc Publisher Pro as your printer. Select the number of copies. The Printer will pick and print as many copies as you select.

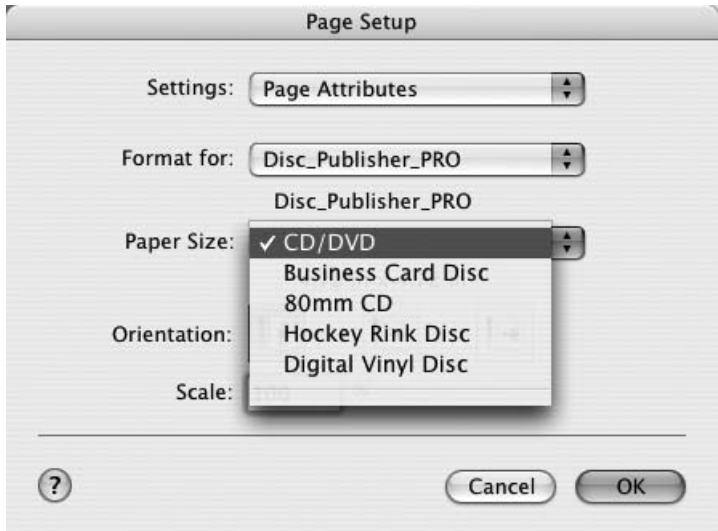
C. PRINTER OPTIONS

The following section will examine the printer driver settings that affect the print quality of your discs. While the default settings will fit most printing needs, it is a good idea to familiarize yourself with these settings to optimize your print quality. The printer driver settings are contained in two areas, Page Setup and Print Setup. You can access the driver settings as follows:

1. From any printing application, click the **Page Setup** and set **Format For** to Disc Publisher Pro.

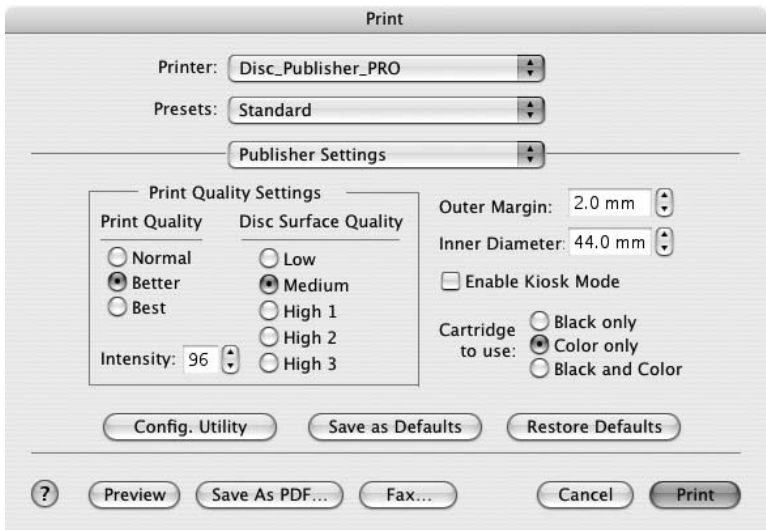


- The paper sizes for the Printer refer to the type of disc to which you will be printing. The available sizes are: CD/DVD, Business Card Disc, 80mm CD Hockey Rink Disc and Digital Vinyl Disc.



Print Settings

Click **Print Setup** to see the driver window and all of its settings. Click the **Copies and Pages** button and select **Printer Settings** option in the drop-down menu to see the full pane and access all the printer driver settings.



The following is a description of the printer driver settings:

- **Cartridge to use**

The **Black and Color** setting will use both cartridges when printing your image. Color will only use the Color Cartridge, and **Black Only** will only use the monochrome cartridge for printing.

- **Kiosk Mode**

Kiosk Mode will allow you to increase the capacity of your Printer from 50 to 100 discs by dispensing finished discs out the front of the unit instead of dropping them to the output bin. This allows you to place blank discs in both the input and output bins doubling your capacity.

Attach the Kiosk Kit to the Printer using the Kiosk Kit installation instructions that came with your printer. This setting will be overridden by the Kiosk Mode setting in Discribe's Robot Write or Job Details Pane.

- **Print Quality**

There are three options for image quality. Keep in mind that Normal provides the fastest print at lower quality while Best delivers the best quality at a slower print speed.

- **Disc Surface Quality**

This setting also affects the Quality of the printed image by altering the **color matching** profile. Start with the default setting for fastest printing and the least ink consumption. If the quality needs improvement, move to the next highest setting.

- **Intensity**

The Intensity setting will control the amount of ink saturation on the disc. When printing onto the Primera ToughCoat discs, 96% is usually sufficient. When printing on to other brands of media, or if you would like to print darker colors, you may wish to increase or decrease the Intensity setting.

- **Inner Diameter**

The inner diameter refers to the size of the non-printed center on your disc. The size of the center hub can vary from one type of media to the next. This allows you to set the inner diameter in millimeters allowing you to print all the way to the center hub regardless of the type of disc you are using. For the discs that Primera sells, use the following guide for Inner Diameter:

- 38.3 mm for Primera's Tuff-Coat CDR
- 24.9 mm for the Hockey Rink Disc, Business Card Disc and 80mm CD

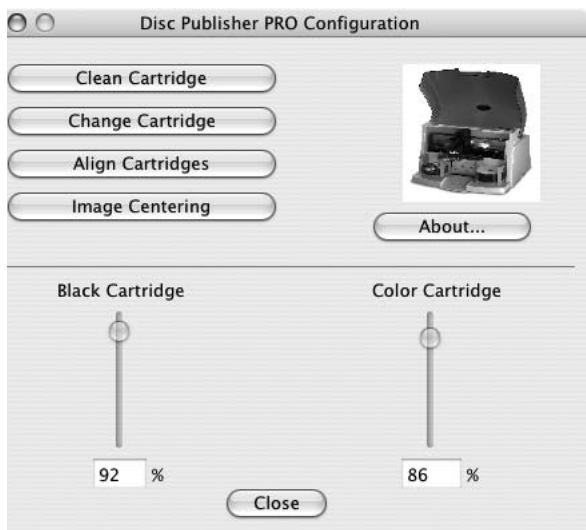
- **Outer Margin**
The Outer Margin refers to where the printing will cut off around the outer edge of your disc. The size of the printable surface can vary from one type of media to the next. This allows you to set the outer margin in millimeters allowing you to print all the way to the edge regardless of the type of disc you are using.
- **Config Utility**
This button launches the Configuration Utility. This Utility is also available in the Print Center by selecting the Disc Printer Pro and clicking the Configure or Utility Icon. This utility is used to report ink levels, clean and change ink cartridges, and align your color and black cartridges for optimal print quality. In addition, this utility will allow you to center and adjust your printed image. Refer to section 4-D of this manual for a detailed description of this program.
- **Save As Default**
The Save As Default button will save the current settings as the system-wide defaults.
- **Restore Defaults**
The Restore Defaults button will restore the driver settings to the factory defaults.

D. CONFIGURATION UTILITY

The Configuration Utility is a program that installs with your Printer software. This utility allows you to monitor ink levels, maintain and calibrate ink cartridges and align printing on the disc. The Configuration Utility can be launched from the Print Center in OSX by doing the following:

1. Click the **Finder**
2. Click the **Applications** Icon
3. Scroll to **Print Center (Printer Setup Utility** in OS X v. 10.3)
4. Highlight the **Disc Publisher Pro** and click the **Configure (Utility** in OS X v. 10.3) Icon

You can also launch the Configuration Utility from the Disc Publisher Pro printer settings in any printing application by clicking **File** then **Print** and selecting **Printer Settings**. In **Printer Settings** you will find a button to launch the **Configuration Utility**. When launched, the following pane appears:



You will see both the Color and Monochrome Ink Levels are displayed. The Color Ink Level represents the lowest color in your cartridge. For instance, if your cartridge has 80% cyan 50% yellow and 65% magenta ink remaining, the level reported would be 50%. You will also see the following buttons:

Clean Cartridge

Cartridges that sit idle in the Printer for a period of time may start to experience some drying of ink in the tiny nozzles that make up the print head. Clicking the **Clean Cartridge** button will cause the Printer to pick a disc and place it into the printer tray. The Printer will then print a simple pattern that will flush ink through the nozzles. The test pattern will also show you if any nozzles are clogged. In the pattern you will see some diagonal lines which should be continuous; breaks in those lines indicate a clogged nozzle. Please note that it may require more than one cleaning to fully clear all nozzles. If the

nozzles are not fully clear after a few cleaning prints, it may be necessary to remove the cartridge and actually clean the print head by gently blotting the nozzles with a moist cloth or paper towel and replace it in the Printer.

Change Cartridge

If you need to change cartridges, it is a good idea to use the **Change Cartridge** button in the Configuration Utility. This ensures the most accurate tracking of ink levels. To change a cartridge, click the **Change Cartridge** button. The cartridge holder will move to the center of the Printer to make it easier to install the cartridges. Lift the top cover and install the cartridges and described in section 2 of this manual. You will be prompted to let the system know whether or not you are installing a new or used color or monochrome cartridge. Once installed, click the **OK** button and the system will update your cartridge levels.

Alignment Calibration Print

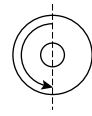
The Cartridge Alignment prints a test print and then automatically scans the print to configure your printer for bidirectional printing and to align the color and black cartridges for Color+Black printing. It is important to perform this calibration every time you change a cartridge. If you forget to perform this calibration you will be prompted to do so before your first print from the new cartridge.

Image Alignment

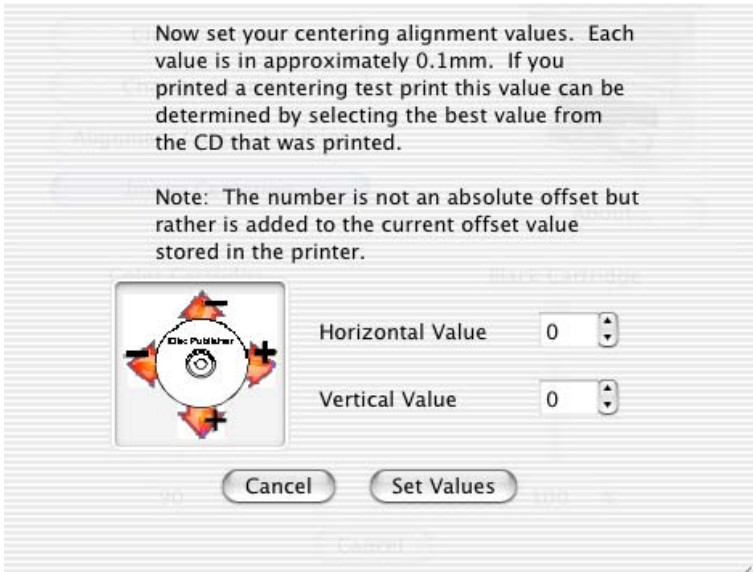
The Image Alignment button will allow you to nudge the image up, down, left, or right on your disc. To center the image, click the Image Alignment button. You will be prompted with a choice to print a test print or simply enter values to nudge the image alignment on the disc.

If you do not know the direction and distance to move the image in order to center it on your disc, you can opt to print the **centering test print**. Make sure the Printer has discs and ink cartridges installed, and it is connected and ready to receive a print job, and then click the **Yes** button. The Printer will pick a disc and print a scale of numbers on it. You will be

prompted to open the Printer's front cover, rotate the printed disc 180 degrees, reload it into the input, and close the cover. Click **OK** when ready and the Printer will pick the disc and print another scale of numbers. The disc should look like this:



Once the print has finished, you will see the following dialog box:





Look at the finished alignment disc and pick the numbers that come closest to lining up with one another. For instance, on the disc shown in this manual, the vertical alignment is 2 and the horizontal alignment is 0. Enter this in the alignment dialog box.

If you choose not to print the test print, you will simply see the alignment dialog box and can enter values to move the image. The unit of measure is roughly 0.1mm. Making the Horizontal Calibration number smaller or more negative will move the image slightly to the left. Making the Horizontal Calibration a larger value, or more positive will move the image to the right. If the Vertical Calibration number is made smaller, or more negative the image will move slightly up. If the Vertical Calibration is set to a larger value, or more positive value, the image will move down on the disc.

Section 5: Interpreting the Printer's Indicator Lights

The Power and Busy **LED indicator lights** located on the top of the Printer can tell you a lot about what is happening inside the Printer. To accurately interpret what it means when these lights are on, off, or flashing, please refer to the following:

Ink Cartridge LED 	Power LED 	Printer
off	on solid	Is ready to receive job
on solid	on solid	Has received a job and is waiting for the Robotic Disc Transporter to load a disc
both lights are slowly blinking alternately with one another		Waiting for a cartridge to be installed and the lid to be closed (See Section 2-A)
both lights are rapidly blinking alternately with one another		The Printer is initializing. You will see this pattern when the Printer is first turned on. Wait until the lights stop blinking before opening software or starting jobs.
flashing rapidly	on solid	The printer tray or ink cartridge carrier has stalled. Press the Ink button to retry the operation.
on solid	flashing rapidly	The Printer has a cartridge problem. Check to make certain that the cartridges are installed correctly.
repeating pattern of both lights flashing in unison, then one light momentarily on solid.		This indicates low ink warning. If the left light stays solid after the flash, the Color cartridge is low. If the right light stays on after the flash, the BlackMonochrome cartridge should be replaced.

Section 6: Maintenance and Troubleshooting

The Printer is designed to operate for extended periods of time with very little attention. In fact, no regular maintenance is recommended other than cleaning the outside case.

NOTE: Do NOT attempt to oil or grease the Printer's Robotic Arm shaft or other components. You will likely cause more harm than good! Any moving parts are designed to operate for the life of the machine with no additional lubrication required.



A. CLEANING THE PRINTER

Use a clean, lint-free rag with a small amount of ammonia window cleaner to clean the Printer's outside case and trays. This type of cleaner is very effective on inks that may accumulate on the printer tray. Stronger cleaning solutions are NOT recommended because they may damage the paint and plastic materials from which the parts are manufactured. Always disconnect your Printer's power cords before cleaning. Resume operation only after the surfaces are completely dry.

B. PERFORMING A ROBOTIC SELF-TEST

To ensure that everything is working properly, a Self-Test feature is built in to your Printer. In this mode, the Robotic Disc Transporter will go through the motions of picking and placing a disc to ensure proper working order. This test may be performed without connecting the Printer to the PC.

Perform the test by doing the following steps:

- Load some discs into the Input Bin
- Open the top recorder tray by pressing the eject button on the recorder.
- Make sure the Printer's front cover is closed
- With the Printer turned on, press the Cartridge Button 
- While holding the Cartridge Button, press the Power Button  until the robotics start to move.

- Release both buttons
- To stop the test, wait until the disc has moved to the Output Bin and press the Power Button.

C. CLEANING THE INK CARTRIDGES

It may be necessary to clean the ink cartridge nozzles if you notice reduced print quality, or if you suspect a cartridge nozzle has become slightly dried out or clogged. Refer to Section 3 for more information on performing a clean function through the Printer's printer driver.

D. CLEARING A MEDIA JAM

If a disc should become jammed inside the printing area of the Printer, with the lid closed press the Cartridge Button. This will eject the Printer Tray. Then open the lid. The Cartridge Carrier will move to the center position automatically. **WAIT FOR THE CARTRIDGE CARRIER TO STOP MOVING!** Then carefully move the cartridge carrier assembly to the left to gain access to the printer tray.

E. TRANSPORTING THE PRINTER

To prevent damage to the Printer's robotic arm during shipment, it is important to properly secure it.

To prepare for transport, remove the ink cartridges and disc holders, close the front cover and then do the following:

1. With the front cover closed, switch off power to the unit.
2. Press and hold the Cartridge Button.
3. While continuing to hold the Cartridge Button, switch on power to the unit.

Continue to hold the Cartridge Button for five seconds. After several more seconds, the robotics will undock and the arm will lower. Power will shut off automatically once the robotics are in transport position. If you have the cardboard spacer that was shipped with the unit, replace the spacer inside the unit and close the cover. If you don't have the cardboard spacer, secure the arm and cartridges to the sides of the unit with tape and close the cover.

F. TECHNICAL SUPPORT

If you have difficulties in operating your Printer, the procedures in this manual and the SureThing software User's Guide should, in most cases, solve the problem. If you still have difficulty, contact the technical support number listed on the insert included in the supply pack that came with your Printer.

Section 7: Technical Specifications

Model	Auto Printer Pro
Printing Method	Ink-Jet
Printing Resolution	4800 x 1200 dpi, 1200 x 1200 dpi, 600 x 600 dpi
Ink Types	Dual Cartridges: One 3-color (CMY) cartridge, and one Black Monochrome (K)
Media Types	Ink-Jet Printable Surface CD-R, CD-RW, DVD-R, DVD RAM, DVD+R, DVD+R.
Maximum print width	4.724" (120mm)
Minimum PC System	Intel™ Processor III/IV 750 MHz or higher, 256MB RAM minimum, 512 MB recommended, available PCI slot, one free USB 2.0 port
Minimum MAC System	G4 PowerPC 700MHz or higher running Mac OS Version 10.2 or higher, 256MB RAM minimum, 2GB free hard disk space (6GB for DVD)
Disc Capacity	50 disc input, 50 disc output (default) 100 disc input, 100 disc output (Kiosk Mode)
Operating Systems	Windows XP and Windows 2000
Interface	USB 2.0 port
Power Requirement	100-120VAC / 220-240VAC (switch-selectable), 50/60Hz, 1.0A
Weight	27.5 lbs. (12.5kg)
Dimensions	17.8"W x 11"H x 17.6"D (452.12mmW x 279.4mmH x 447.4mmD)
EMC Certifications	FCC Class B, CE
Safety	UL, UL-C, CE
Warranty	One year return-to-depot

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